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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,960	10/29/2001	Akira Okamoto	A-412	3459
802	7590	05/18/2004	EXAMINER	
DELLETT AND WALTERS P. O. BOX 2786 PORTLAND, OR 97208-2786			KINKEAD, ARNOLD M	
			ART UNIT	PAPER NUMBER
			2817	

DATE MAILED: 05/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/980,960

Applicant(s)

OKAMOTO ET AL.

Examiner

Arnold M Kinhead

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-13 is/are allowed.
- 6) ☒ Claim(s) 14-18, 20-22, 24, 26-28, 30 and 31 is/are rejected.
- 7) ☒ Claim(s) 19, 23, 25 and 29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### *Response to Arguments*

The changes to claims 1,11,12, and 13 has overcome the rejection under 35 U.S.C. 103(a); however, the new claims 14-31, recite new elements such as a passive element connection between outer ends. This will be shown to be conventional by way of reference JP48-44755 cited by applicants.

### *Claim Objections*

1. Claim 10 is objected to because of the following informalities: on line 3, " the conductor" should read – one conductor--. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the

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time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 14-18, 20-22, 24, 26-28, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over (JP 7-336138 of record ) in view of (60-136156 JP cited by applicant) in view of (EP 0 661 805 A1 cited by applicant) and further in view of (JP48-44755).

The reference(' 6138) discloses an LC oscillator(see figures 1,43,63,62,64,65,79, 77 and 78(I) with regards the spiral and meander (long shape)type inductor coil structure. As shown in figure 78(I), the substrate(320) and

coils 322 and 324(conductors) are shown. Note insulator(326). The two spiral conductors have substantially the same shape. Distributed type capacitance is formed by way of the spiral coils.

The reference does not show connection of opposite ends of the conductors nor the use of a conductor with less than one turn or linear shaped.

With regards opposite end connections, that is, inside to outside ends of each conductor, the reference(JP' 156) does show in figures 11 and 12, situations where when the coils are oppositely wound the inside point on K1" is connected to outside K3" to form the inductance.

With regards the use of a single turn or less, or the linear shape, the reference by (JP ' 805) shows in figure 31a, and 34, the respective linear and curved inductor shapes that are conventional shapes for the inductor(s) that maybe formed on the substrate as desired.

Lastly, the reference does not show a passive/conductor element for connecting the outer conductor ends, but this is conventional, see (JP48-44755), figure 2, showing middle layers with coils

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connected by a conductive wire. This allows for the proper circuit connection as desired between the outer ends of the two coils.

In light of the above it would have been obvious for one of ordinary skill in the art at the time of the invention to have connected the coils of (JP' 6138) with the inside of one conductor to the outside of the other depending on how the coils were wound as shown in (JP' 156) . The desired inductor being formed with two separate conductors. The use of linear or single curve conductors being conventional for forming the inductor elements as noted in (JP ' 805) and allow for design flexibility and arrangement on the substrate. Lastly, connecting inner or outer ends of the conductors with a passive element such as a wire conductor is suggested by the JP48-44755 reference to allow the desired circuit configuration and electrical connections.

*Allowable Subject Matter*

4. Claims 19,23, 25, and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
5. Claims 1-13 are allowed. The examiner could not find fair suggestion for the open end near the substrate.

*Conclusion*

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

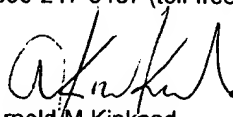
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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnold M Kinkead whose telephone number is 571-272-1763. The examiner can normally be reached on Mon-Fri, 8:30 am -5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Arnold M Kinkead  
Primary Examiner  
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